

Notice of Allowability    10/633,730     LEE_JU_YEAB   Examiner     Art Unit   David Lam   David Lam		Application No.	Applicant(s)	
David Lam  David Lavid	Notice of Allowability			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  1. This communication is responsive to  2. The allowed claim(s) is/are 1-7.  3. The drawings filed on 04 August 2003 are accepted by the Examiner.  4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some* c) None of the:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  *Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) hereto or 2) to Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of	rtotioo or runoviasinty	Examiner	Artonit	
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.  1. This communication is responsive to  2. The allowed claim(s) is/are 1-Z.  3. The drawings filed on 04 August 2003 are accepted by the Examiner.  4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some c) None of the:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Fallure to timely comply will result in ABANDONMENT of this application.  THIS THREE MONTH PERIOD IS NOT EXTENDABLE.  5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) hereto or 2) to Paper No./Mail Date  (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		David Lam	2818	
2. ☑ The allowed claim(s) is/are 1-7. 3. ☑ The drawings filed on 04 August 2003 are accepted by the Examiner. 4. ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☑ All b) ☐ Some* c) ☐ None of the:  1. ☑ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) ☐ hereto or 2) ☐ to Paper No./Mail Date  (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of	All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RICE.	(OR REMAINS) CLOSED in this apport or other appropriate communication GHTS. This application is subject to	olication. If not includ will be mailed in due	ed course. <b>THIS</b>
3. ☑ The drawings filed on 04 August 2003 are accepted by the Examiner.  4. ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☑ All b) ☐ Some* c) ☐ None of the:  1. ☑ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  1) ☐ hereto or 2) ☐ to Paper No./Mail Date  (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of	1. This communication is responsive to			
4. ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☑ All b) ☐ Some* c) ☐ None of the:  1. ☑ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  1) ☐ hereto or 2) ☐ to Paper No./Mail Date  (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of	2. The allowed claim(s) is/are <u>1-7</u> .			
a) \[ All \] b) \  Some* c) \  None of the:  1. \[ Certified copies of the priority documents have been received. 2. \  Certified copies of the priority documents have been received in Application No 3. \  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. \  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.  6. \  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  (a) \  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  1) \  hereto or 2) \  to Paper No./Mail Date  (b) \  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of	3.   The drawings filed on 04 August 2003 are accepted by the	Examiner.		
	a) All b) Some* c) None of the:  1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give 6. CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftsperson (b) including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1.	been received. been received in Application Nocuments have been received in this receiv	national stage applicational stage application and stage application of the front (not the last in the front (not the	quirements
	<ul> <li>Attachment(s)</li> <li>1. ☑ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/06 Paper No./Mail Date 3/1/04</li> <li>4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	5.  Notice of Informal P 6. Interview Summary Paper No./Mail Dat 7. Examiner's Amenda 8. Examiner's Stateme 9. Other	(PTO-413), re nent/Comment	owance

## Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance: Claims 1-7 are allowable over the prior art of record because none of the prior art whether taken singularly or in combination, especially when these limitations are considered within the specific combination claimed, to teach: a word line repair circuit comprising: a word line voltage switching unit, among others as claimed in independent claim 1, for transferring a word line voltage applied to a fail word line to a redundancy cell array according to information on the fail word line, wherein data to be stored through the fail word line are sequentially stored through a corresponding column of a repair block in an I/O block unit, thereby repairing the fail word line.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

- 2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - Chai et al. (6,385,071) disclose a redundant scheme for CAMRAM memory array.

Art Unit: 2818

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lam whose telephone number is 571-272-1782. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Lam

DAVID LAM
PRIMARY EXAMINER

July 15, 2004